

Kalzip[®] Finishes and Colours

Roof and Facade systems



Expressive colours and finishes for expressive architecture

There are many ways to express aesthetics through finishes and colours in architecture. Our visual perception changes according to shifting light – such as the time of day, the changing seasons and the play between light and shade. Moisture, rain, frost and light all anchor a structure within its environment and make shapes and moods more tangible.

Therefore, finishes and colours are among the strongest means of expression in architecture. They convey a building's identity and individuality, create distinctiveness and impressively shape the appearance of modern buildings.

Kalzip roof and facade systems enable classic and sophisticated architectural styles to be materialised and give form to modern architecture like no other building system can.



Résidence Hôtelière du Rail, Rennes (F)
Architect: ALL ARCHITECTES
Finishes: AluPlusPatina Champagne G12
Product: Kalzip FC 30/250/1,2 mm; 30/500/1,2 mm and 30/500/1,2 mm, perforated Rv 6-8

Kalzip finishes – uncompromisingly metallic

Classic stucco-embossed finish

Kalzip profiled sheets are available in a classic stucco-embossed version. This natural metallic finish is achieved through treatment by embossing rollers.

The sheets have extraordinary characteristics – for example, the extremely robust finish is resistant to mechanical damage during installation, while the diffused reflection of the finish reduces glare.

The material is particularly well suited to shaping larger roof and facade areas.

With a natural grey tone, the aluminium finish is resistant to salt water and is weatherproof in even the harshest environmental conditions.

Features of the stucco-embossed Kalzip finish:

- Extremely weather-resistant and robust
- Reduced glare due to diffused light reflection



Stucco embossed

Kalzip colours – unlimited variety



Modern building technology places high demands on materials when it comes to weathering and corrosion resistance. Coloured Kalzip aluminium profiled sheets are the result of state-of-the-art surface treatment technologies.

Consistent colour quality

The aluminium coils, which are coated using a coil-coating process, undergo numerous steps. Depending on the type of coating, they are given different pre-treatments and painted in the desired colour. Aluminium coils with a single-sided coating are provided with a protective coat of varnish on the rear side. Only high-quality enamels which have a polyester, PVDF or HPC base are used, in order to achieve a weather-resistant and colour-fast coating.

The coil coating process is monitored in accordance with the standards of the ECCA (European Coil Coating Association). Key criteria are colour tone, degree of shine, thickness of varnish, hardness of varnish, adhesion of varnish and malleability. Long-duration tests are carried out, such as acid salt spray tests, QUV B tests, condensation tests in an SO₂-saturated atmosphere and open-air weathering tests in harsh environments.

Kalzip profiled sheets with polyester coating

This coating is robust and can be easily formed, as well as being weatherproof and UV-resistant. Kalzip profiled sheets in a polyester finish are mainly used in areas with normal environmental conditions.

To protect the finish during installation, we offer a choice of protective film on the large roll or protective film over the entire surface (excluding the small roll).

Kalzip profiled sheets with PVDF coating

This coating performs particularly well in harsh environments and extreme climatic conditions, for example near salt water. Profiled sheets in PVDF quality are characterised by outstanding UV-resistance, have exceptional forming characteristics and are used primarily for facade design.

Kalzip ProTect coating

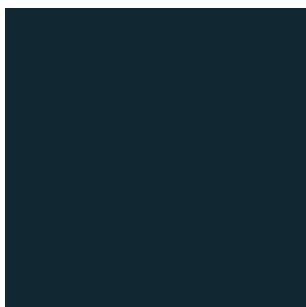
To protect the finishes, Kalzip also offers a high-quality and extraordinarily weather-resistant special coating, based on a polymer technology that uses fluorocarbon (FLP). It delivers extremely high resistance to scratching, optimum colour tone stability, and considerably higher surface hardness and temperature resistance.

Features of the ProTect coating:

- Available for RAL, NCS and metallic colours
- Outstanding long-term characteristics with very low chalking tendency
- Very good resistance to dirt due to a Teflon-like behaviour, which reduces cleaning requirements
- Resistant to chemicals, even to harsh emissions such as aircraft exhaust gases
- Thanks to the FLP technology and an additional coat of clear varnish, an 'Anti-Graffiti effect' is achieved, offering effective protection against vandalism
- Also available in high gloss finishes
- Conforms to the examination conditions of the Florida test (exposure test for over 20 years)



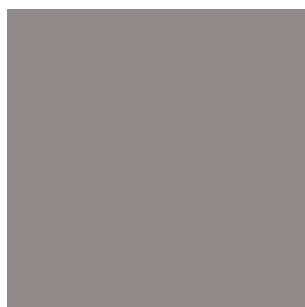
Standard finishes for Kalzip profiled sheets with polyester coating
(depending on the profile type and material thickness)



RAL 7016 Anthracite Grey



RAL 9006 White Aluminium

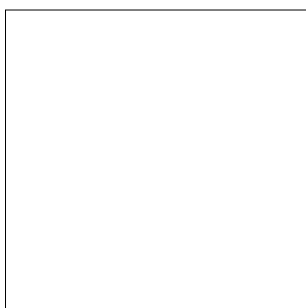


RAL 9007 Grey Aluminium

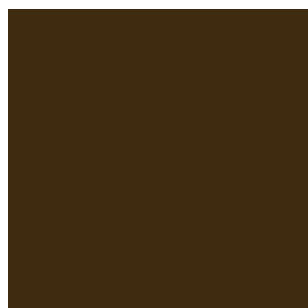


RAL 7012 Basalt Grey (UK Only)

Non-standard finishes for Kalzip profiled sheets with polyester coating
(Minimum quantity 300m² depending on the profile type and material thickness)



RAL 9010 Pure White



RAL 8014 Sepia Brown



Further colours in RAL / NCS and special colours on enquiry

Kalzip HPC - High-Performance Colour system (HPC)

Exclusive colours in the High-Performance Colour system (HPC/HPC R) with long-term guarantees

The High-Performance Colour system (HPC) is a further development that uses a polymer resin base to deliver particularly high chalking resistance and colour stability. Highly resistant, it is suitable for use in harsh and demanding climatic conditions, with a high level of UV radiation. With a gloss level of just 3%, Kalzip HPC sets new trends in roof and façade design.

The new HPC R finish, in the colours stone grey and anthracite grey, features a slightly rough texture. It is robust and extremely resistant to UV radiation and chalking. The environmentally friendly coil coating process and the elimination of surface films makes the HPC R finish a sustainable choice.

Chalking/colour stability

The chalking of paints is regulated by a rating system. Each colour begins with 10. The stronger the chalking, the lower the value. The HPC/HPC R colour system has a value of ≥ 8 after 15 years, which is regarded as excellent or almost

imperceptible. The same applies to colour stability, which has a value of $< 5\Delta E$. The colour system thus delivers outstanding stability.

Benefit from a 15-year manufacturer's warranty for colour stability and chalking. A 20-year warranty is available for façade applications. This advantage is unique in the market and applies, under normal atmospheric effects and conditions, to

- Kalzip profiled sheets in all widths
- Kalzip FC façade panels
- Kalzip flat sheets and coils

Scope of application: Applies to Europe

To protect the HPC finish during installation, a protective film is applied over the entire surface (except for the small roll). This is not used with HPC R.



Properties of coil coating colour systems

Paint system	Layer thickness (µm)	Balance of hardness and flexibility	Chemical resistance	Chalking behaviour	Weathering resistance	Gloss level %
Polyester 2-layer	25 +/- 5	+	+	+	+	10 - 80
PVDF 2-layer	25 +/- 5	+	++	++	++	10 - 30
HPC 2-layer	35 +/- 5	+	++	++	++	3 - 80

+ > good ++ > excellent

Source: ECCA European Coil Coating Association



Old people's care home Am Hirschgarten, Erfurt (D)
Architect: Architekturbüro Hose
Finish: NCS-S-0575-G40Y,
RAL Design 120 70 75, RAL Design 110 60 65
Product: Kalzip FC 30/300

Standard finishes for Kalzip profiled sheets and FC façade panels
(depending on the profile type and material thickness)



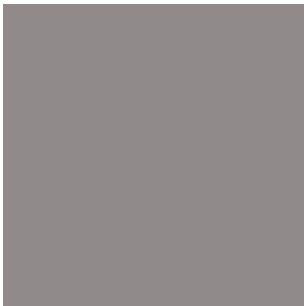
HPC M353 Anthracite Grey R



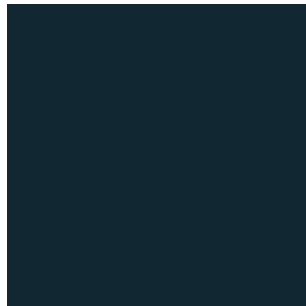
HPC M353 Stone Grey R



HPC M353 RAL 9006
White Aluminium

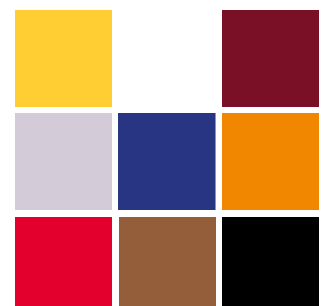
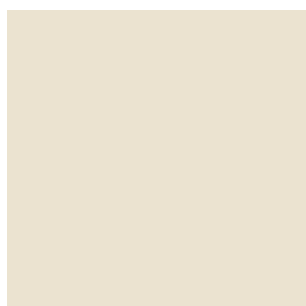


HPC M353 RAL 9007



HPC M353 RAL 7016
Anthracite Grey

Non-standard finishes for Kalzip profiled sheets and FC façade panels with HPC coating
(Minimum quantity 300m² depending on the profile type and material thickness)



Further colours in RAL / NCS and
special colours on enquiry

Kalzip AluPlusPatina – stylish matt option for roofs and façades

The metallic AluPlusPatina option for roof and façade systems enables planners and architects to create sophisticated surfaces in gold, bronze and copper finishes.

A special surface treatment reduces the diffused light reflection of the pre-weathered surfaces. The tints are produced using electrolytic passivation, without the need for paint application. The passivated coating will maintain the same thickness throughout its use, ensuring a long service life.

The AluPlusPatina finishes are available as standard for all Kalzip standard widths as well as for the new Kalzip FC façade system.

Features of Kalzip AluPlusPatina:

- Extremely weather-resistant and robust finish
- Ideal for building envelopes that merge into the façade
- Dirt-repellent and scratch-resistant finish – resists marking by fingerprints
- UV-resistant
- AntiGraffiti
- No filiform corrosion

AluPlusPatina Basic stucco-embossed

- stucco-embossed, patinated finish
- Achieves the look of a naturally weathered aluminium surface
- Special surface treatment creates matt appearance, as well as uniform surface greying

AluPlusPatina Basic natural

- Smooth rolled, matt finish for simple and functional requirements
- Achieves the look of a naturally weathered aluminium surface
- Special surface treatment creates matt appearance
- 10-year warranty under normal atmospheric influences
- Anti-graffiti properties, with easy-to-clean surface

AluPlusPatina EQ

- Further development of the existing AluPlusPatina finishes
- Sophisticated shades in bronze
- Tinted using electrolytic passivation, without paint application
- Maintains its original 5-micron layer thickness throughout use, which guarantees a long lifetime
- Suitable for rolled aluminium coils
- Anti-graffiti properties, with easy-to-clean surface



Fire brigade, Sickinge (D)
Architect: struhkarchitekten BDA, Braunschweig
Finish: AluPlusPatina Bronze B40
Product: Kalzip FC 600 and FC 300



SHK Innung, Munich (D)
Architect: Muck Petzet Architekten
Finish: AluPlusPatina Bronze B40
Product: Kalzip 65/400 and 65/333

Metallic standard finishes for Kalzip profiled sheets and FC façade profiles
(depending on the profile type and material thickness)



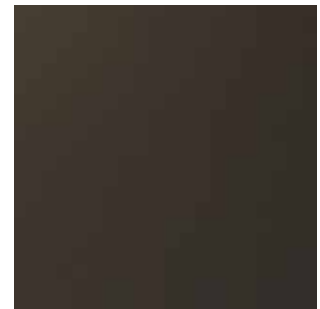
AluPlusPatina natural aluminium,
stucco-embossed



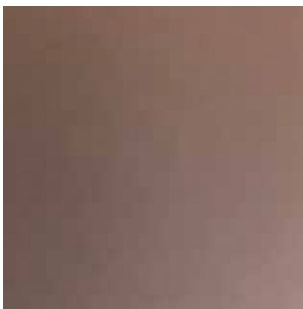
AluPlusPatina natural aluminium,
mill finish



AluPlusPatina Medium-dark
bronze B 40, mill finish



AluPlusPatina UltraDark mill finish



AluPlusPatina Red Copper
mill finish

To protect the finish during installation, a protective film is applied over the entire surface (except for the small flange).

Metallic non-standard finishes for Kalzip profiled sheets and FC façade profiles
(Minimum quantity on enquiry, depending on the profile type and material thickness)



Champagner G 12 – mill-finish



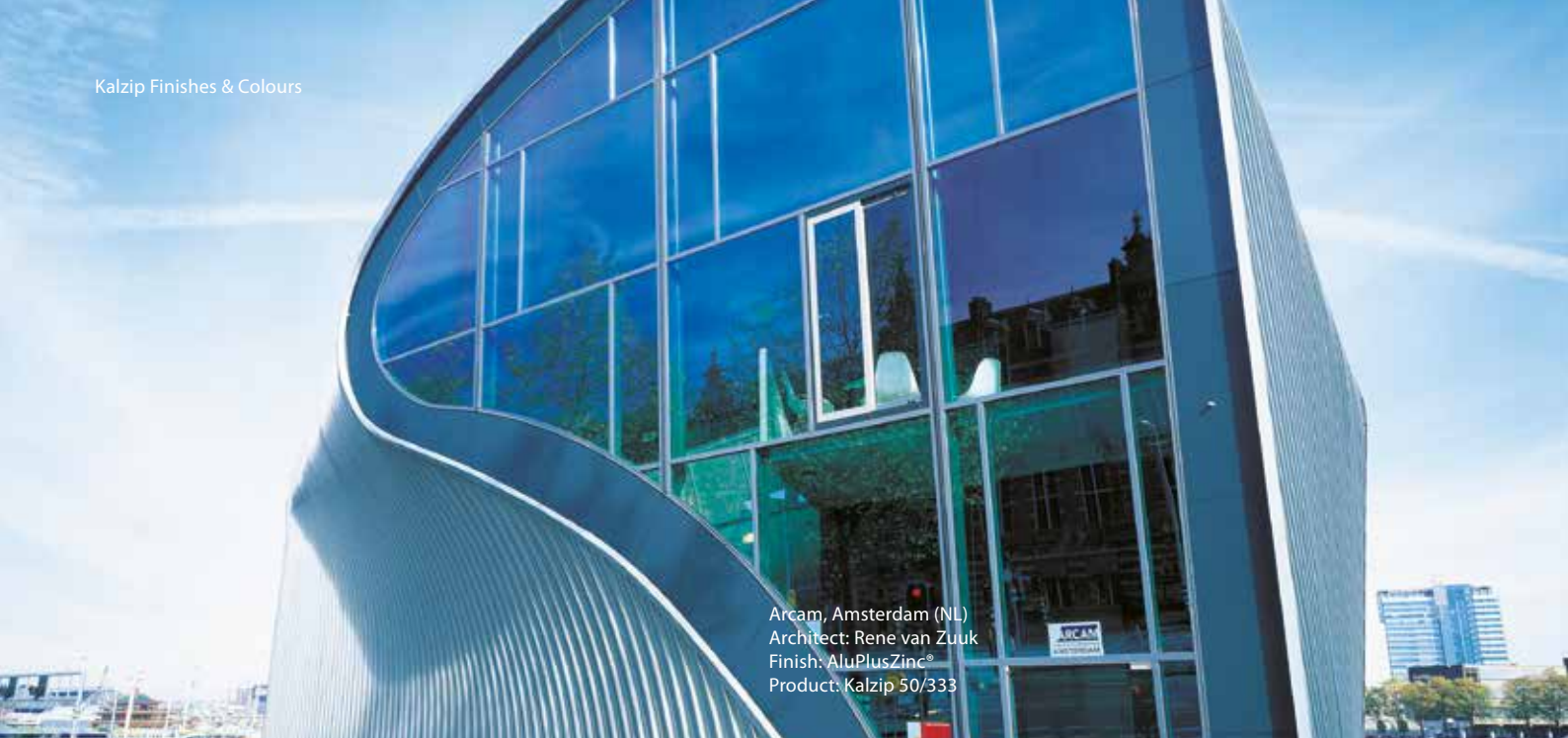
Medium Gold G 30 mill-finish



Mid-Bronze B 30, mill-finish



Dark Bronze B 50, mill-finish



Arcam, Amsterdam (NL)
Architect: Rene van Zuuk
Finish: AluPlusZinc®
Product: Kalzip 50/333

Traditional zinc or elegant slate look – the Kalzip AluPlusZinc® finishes

AluPlusZinc and AluPlusZinc Dark are inspired by the look of traditionally weathered zinc. They give buildings, roof landscapes and façades an unmistakable character. The timeless, aesthetic appeal of the classic, weathered zinc patina or the understated grey of the slate harmonises with traditional roof and wall cladding. As if it were 'alive', the patination of both finishes continues to develop thanks to environmental conditions and always remains impressive.

With strict quality standards and a patented process, this produces high-tech aluminium products for demanding projects.

To protect the finish during installation, a protective film is applied over the entire surface (excluding the small roll).

Features of Kalzip AluPlusZinc and AluPlusZinc Dark:

- Zinc patina applied using the PEGAL process
- Salt water resistant aluminium alloy - for corrosion-proof, sustainable and lasting aesthetics
- No contamination of groundwater due to heavy metal ion leaching
- Ideal for sensitively blending with existing features when refurbishing
- Convincing look for new construction projects
- Cost effective and high performance



AluPlusZinc



AluPlusZinc Dark

Warranty

Due to the limitations of print technology, the images within this brochure cannot offer an exact representation of the finishes and colours. Natural irregularities within the base materials used to produce our stucco embossed or pre-weathered surface finishes (e.g. AluPlusPatina, TitanSilver), as well as the transparent varnish systems, mean that production related colour variations cannot be ruled out.

These differences in colour, which are not caused by production techniques, mostly appear at the edges of the coils and are only visible as optical irregularities depending on the view-point, as well as light and weather conditions. Colour deviations of this kind do not

represent a material defect as defined by warranty regulations or in accordance with DIN 485-1; hence warranty claims cannot be accepted on this basis.

For more information on delivery times and minimum quantities, please refer to the standard overview for profiled sheets, panels, metallic surfaces and colours.



Your Kalzip contacts

